

## Success Story

# HCR 6000

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ABB won an repeating order from Shandong Xinyuan Aluminum Company to supply 16 units of HCR 6000 high power rectifiers and services for its two potlines due to product excellent performance, service and reliability.



HCR 6000 in Shandong Xinyuan Aluminium Company

### Project description

Xinfa group is one of the largest Aluminium enterprises in China, which capacity of aluminum reaches 4000kt per year. ABB supplied first rectifier to Xinfa in 2009, and won the customer's recognition and trust with product excellent performance, service and reliability. Both sides have been cooperating closely and customer preferred ABB in later projects.

In 2014, ABB supplied eight units of HCR 6000 to the customer Xinjiang branch to provide 500kA direct current for one potline. Compared with previous APR rectifier technology, HCR 6000 is more safe, reliable and efficient.



High Current Rectifier - HCR 6000

### ABB's solution for aluminium smelting in China

HCR 6000 rectifiers are specially designed for the primary aluminum smelter industry in the Chinese market and perfectly match co-phase anti-parallel rectifier transformers which are commonly in use for aluminum application in China.

HCR 6000 introduced welded water-cooling aluminum busbars as a frame to improve current distribution and mechanical strength. HCR 6000 is the enabler to capture more high-end rating applications and identifies ABB clearly as the number one global technology leader of high power rectifiers industry.

### The actual project

For the captioned project, the customer Shandong branch Xinyuan Aluminium Company is building up two potlines in Chiping Shandong province. These potlines will be the largest in the world and operate at a direct current level of 630kA each. Due to the trust of ABB and based on earlier successful cooperation, the customer awarded the repeat order to ABB before Chinese New Year at February 2016 without public bidding.

ABB supplied 16 units of HCR 6000 for the electrification of two potlines, which will have an annual production capacity of 660kT. The order also included control and cooling units, DC isolators, auxiliaries and other services. Both potlines will be put in operation in 2017.

HCR 6000 was introduced in 2010 and became the base for securing many orders from domestic aluminium industry for ABB. Until today, more than 100 units have been supplied to the domestic market.

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